

**Pre-AP Geometry 7.5 Assignment**  
**Glide Reflections & Compositions (pp 430-432)**  
**Omit 2, 6, 7, 11, 14, 16, 18, 24, 25**

**Page 1**

1. What is your name?

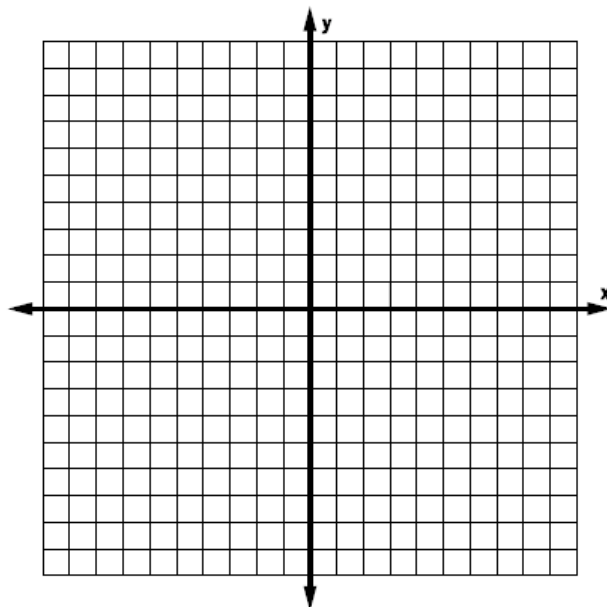
The preimage  $\triangle ABC$  has coordinates  $A(-1, -3)$ ,  $B(1, 1)$ , &  $C(5, -1)$ . State the coordinates of  $\triangle A'B'C'$  after the following transformations.

2. Translation:  $(x, y) \rightarrow (x + 6, y + 4)$

3. Rotation:  $90^\circ$  about the origin.

4. Translation:  $(x, y) \rightarrow (x - 5, y - 4)$

5. Reflection:  $y = -x$ .

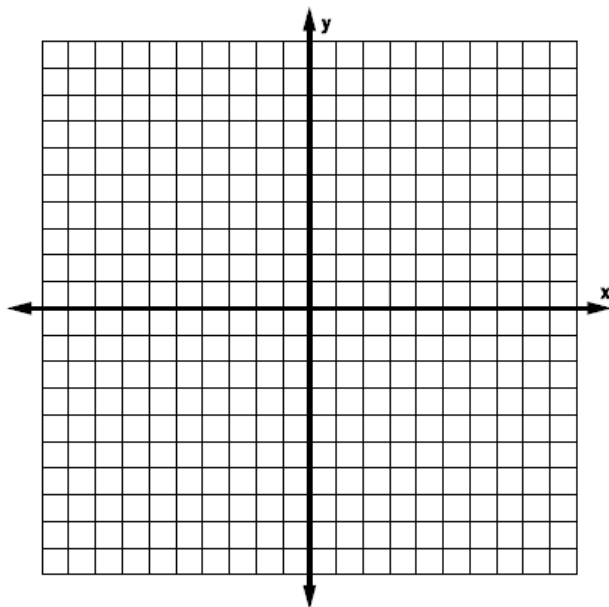


**Glide Reflections & Compositions (pp 430-432)**

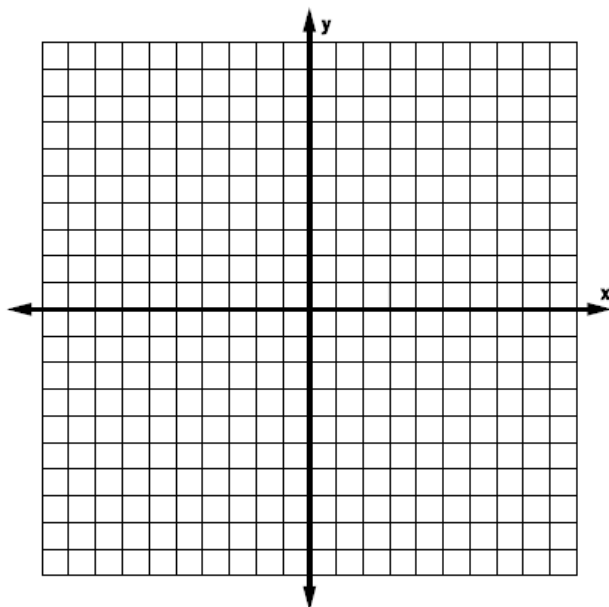
**Omit 2, 6, 7, 11, 14, 16, 18, 24, 25**

**Sketch the image of A(3, 5) after the described glide reflection.**

6. Translation:  $(x, y) \rightarrow (x + 3, y - 2)$   
Reflection:  $y$ -axis



7. Translation:  $(x, y) \rightarrow (x + 5, y - 4)$   
Reflection:  $y = -2$



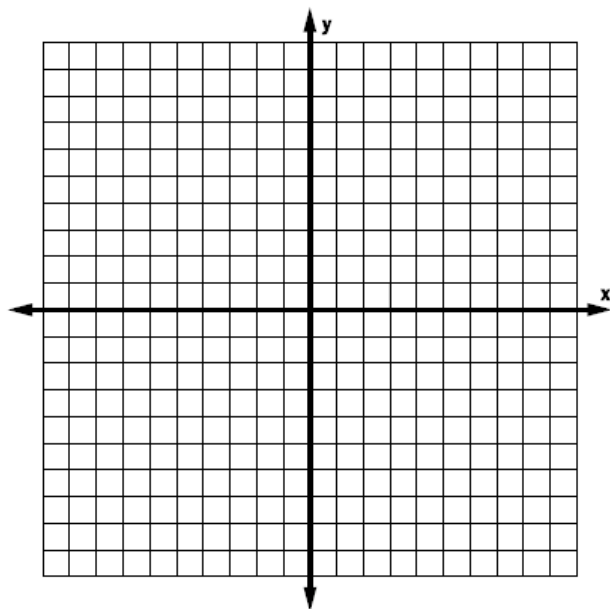
**Glide Reflections & Compositions (pp 430-432)**

**Omit 2, 6, 7, 11, 14, 16, 18, 24, 25**

**Sketch the image of A(3, 5) after the described glide reflection.**

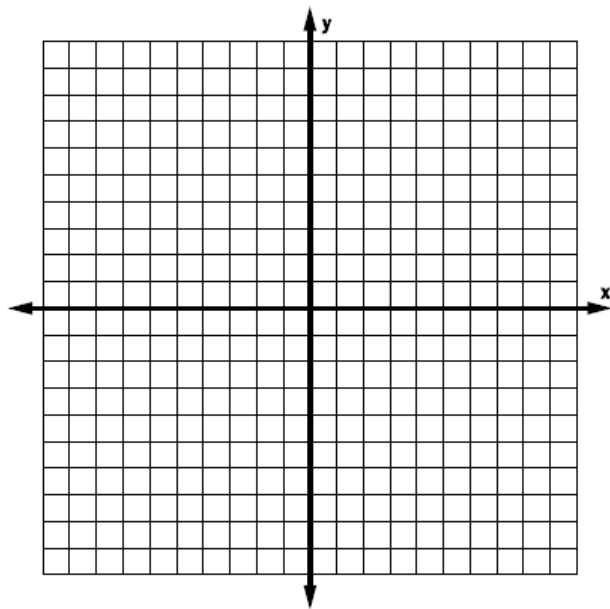
8. Translation:  $(x, y) \rightarrow (x - 6, y)$

Reflection:  $x = 4$



9. Translation:  $(x, y) \rightarrow (x - 1, y - 4)$

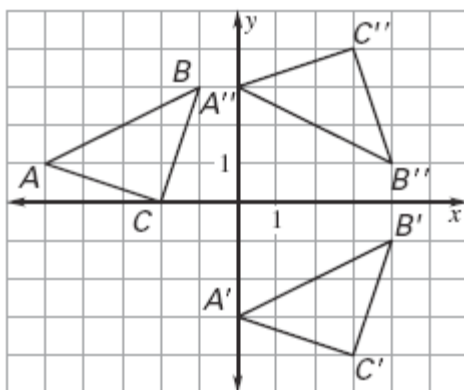
Reflection:  $y = -x$



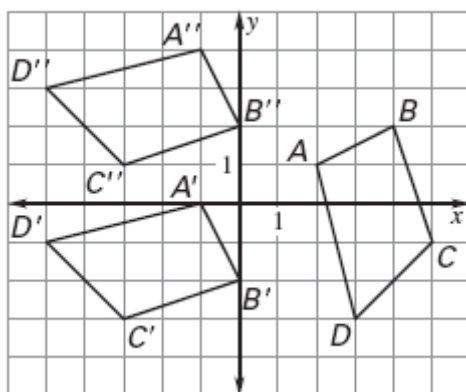
**Pre-AP Geometry 7.5 Assignment**  
**Glide Reflections & Compositions (pp 430-432)**  
**Omit 2, 6, 7, 11, 14, 16, 18, 24, 25**  
**Describe the composition of the transformations.**

**Page 4**

10.



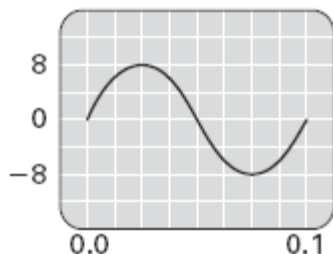
11.



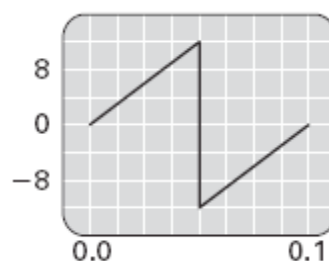
Omit 2, 6, 7, 11, 14, 16, 18, 24, 25

Decide whether the part of the waveform that is below the  $x$ -axis is a glide reflection of the part that is above. If it is, write the translation using a vector in component form.

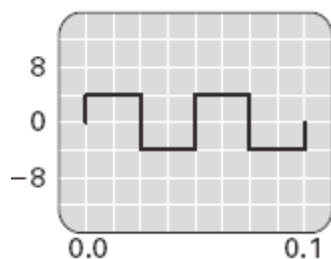
12.



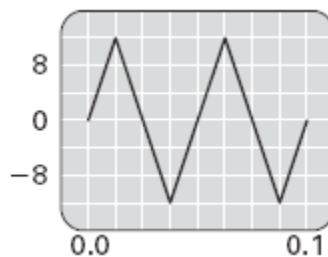
13.



14.



15.



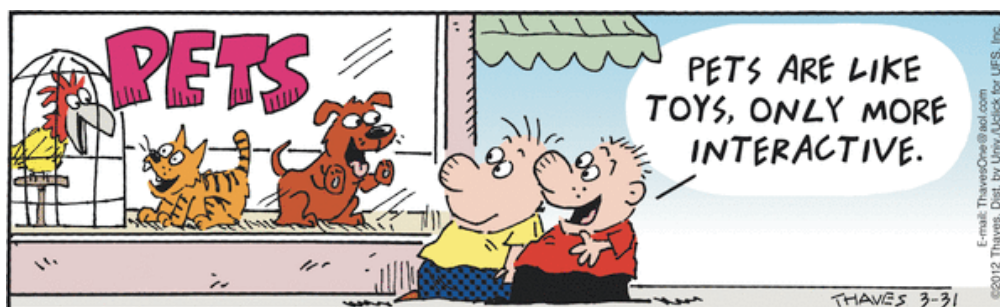
### Review.

Sketch the next figure in the pattern. (Chapter 1 section 1).

16.



17.



**Pre-AP Geometry 7.5 Assignment**  
**Glide Reflections & Compositions (pp 430-432)**  
**Omit 2, 6, 7, 11, 14, 16, 18, 24, 25**  
**Sketch the next figure in the pattern.** (Chapter 1 section 1).

**Page 6**

18.

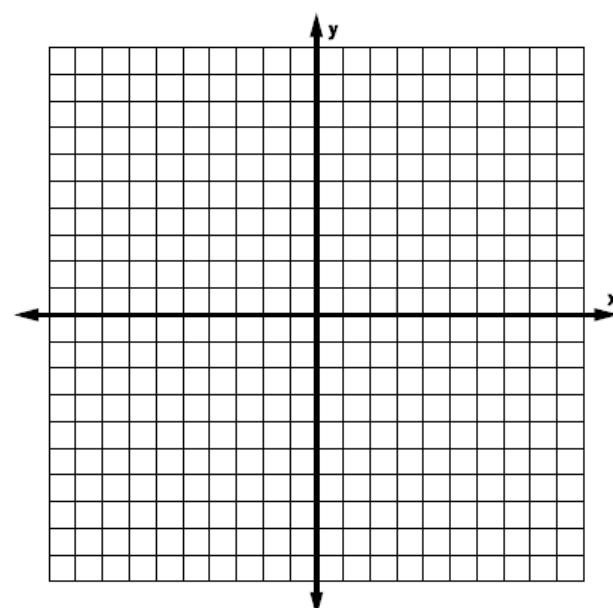


19.

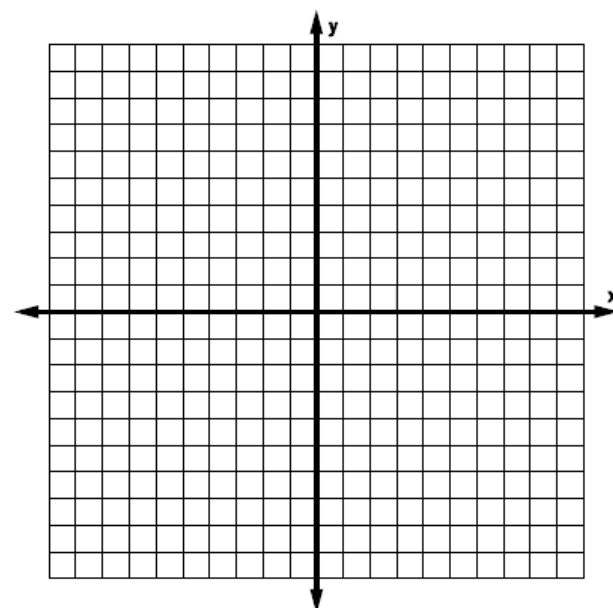


**Decide whether  $\square PQRS$  is a *rhombus*, a *rectangle*, or a *square*. Explain your reasoning.** (Chapter 7 section 3).

20.  $P(1, -2)$ ,  $Q(5, -1)$ ,  $R(6, -5)$ , &  $S(2, -6)$ .



21.  $P(10, 7)$ ,  $Q(15, 7)$ ,  $R(15, 1)$ , &  $S(10, 1)$



Pre-AP Geometry 7.5 Assignment  
Glide Reflections & Compositions (pp 430-432)

Page 7

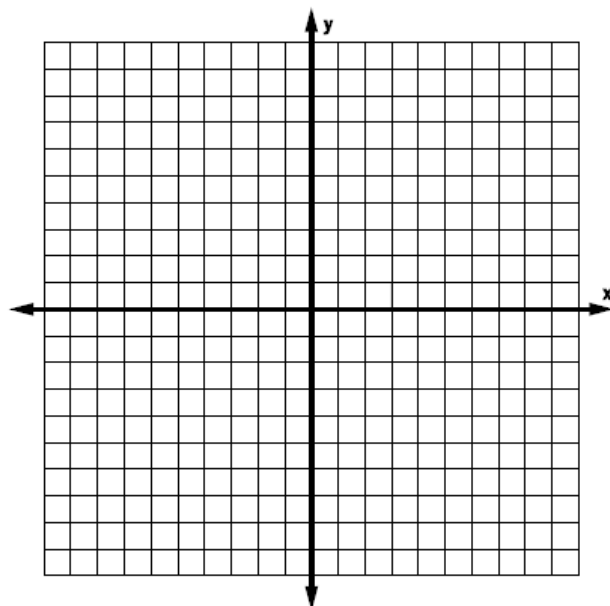
Omit 2, 6, 7, 11, 14, 16, 18, 24, 25

Decide whether  $\square PQRS$  is a *rhombus*, a

*rectangle*, or a *square*. Explain your

**reasoning.** (Chapter 7 section 3).

22.  $P(8, -4)$ ,  $Q(10, -7)$ ,  $R(8, -10)$ , &  $S(6, -7)$



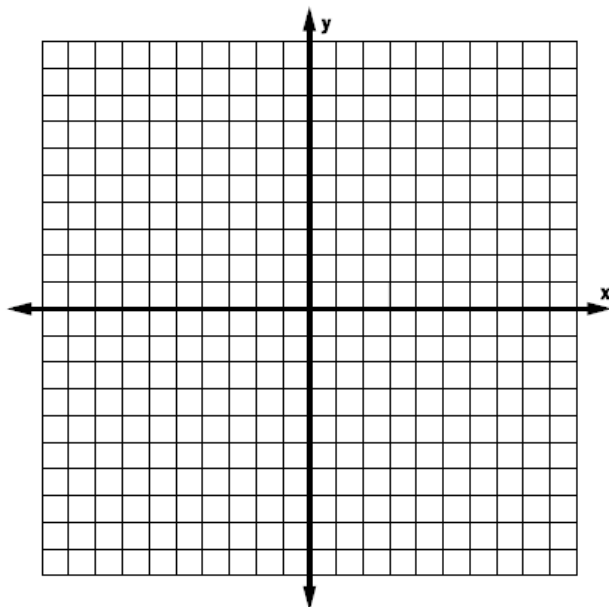
23. A segment has endpoints  $(3, -8)$  and  $(7, -1)$ . If the segment is rotated  $90^\circ$  counterclockwise about the origin, what are the endpoints of its image? (Chapter 7 Section 3)



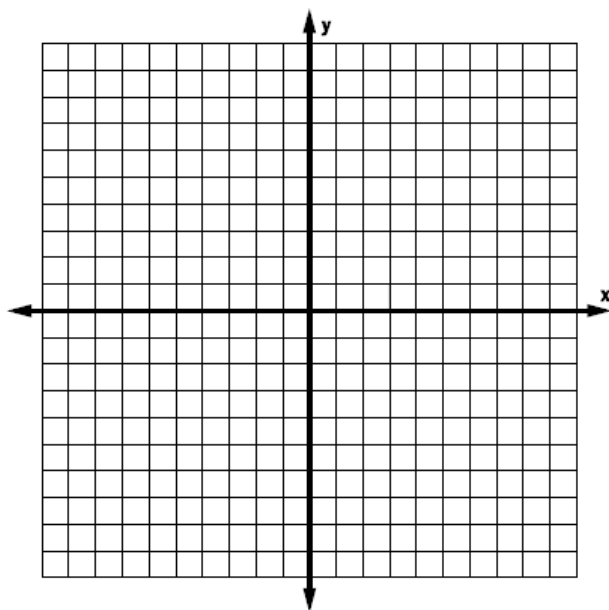
**Glide Reflections & Compositions (pp 430-432)****Omit 2, 6, 7, 11, 14, 16, 18, 24, 25**

Sketch  $\triangle ABC$  with vertices  $A(-9, 7)$ ,  $B(-9, 1)$ , and  $C(-5, 6)$ . Then translate the triangle by the given vector and name the vertices of the image.

24.  $\langle -1, 5 \rangle$



25.  $\langle 0, 2.5 \rangle$

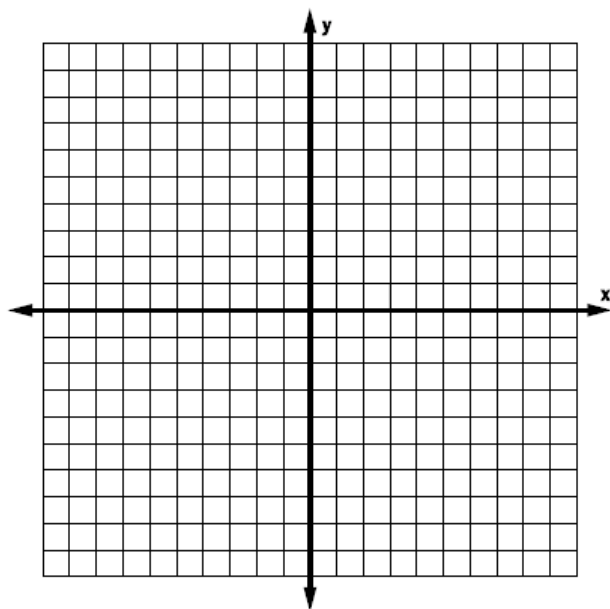




**Glide Reflections & Compositions (pp 430-432)****Omit 2, 6, 7, 11, 14, 16, 18, 24, 25**

Sketch  $\triangle ABC$  with vertices  $A(-9, 7)$ ,  $B(-9, 1)$ , and  $C(-5, 6)$ . Then translate the triangle by the given vector and name the vertices of the image.

26.  $\langle 6, 0 \rangle$



27.  $\langle 1.5, -4.5 \rangle$

